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Overview of progress towards sustainable development: a review of the implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation

Report of the Secretary-General**

Summary

The present report contains a review of progress towards realizing the commitments and meeting the targets agreed in Agenda 21 and in outcomes of subsequent intergovernmental meetings related to sustainable development, notably the Johannesburg Plan of Implementation. The picture is mixed.

The most populous continent has seen the biggest reductions in poverty, in the process boosting growth around the developing world through strong demand for energy and other raw materials. Still, much of Africa faces worsening food insecurity, exacerbated by chronic or recurrent conflicts, with the number of food emergencies having more than doubled in the past two decades. Significant progress has been made in extending access to safe drinking water and sanitation, including in the poorest regions. While under-five mortality rates have declined in the past decade and a half, in many countries they remain high, as do maternal mortality rates. A number of major initiatives are under way to develop and make available effective vaccines and treatments for neglected infectious diseases, including HIV/AIDS, but further improvements in the affordability and accessibility of medicines for the poor are still sorely needed, as are strengthened health-care delivery systems in poor countries.

* E/CN.17/2006/1.

** Submission of the present report was delayed owing to the need to have incorporated the latest data.

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Progress with respect to natural resource management has been mixed: on the one hand, more countries have integrated water resource management plans, there is a growing area of certified forests (albeit mostly in temperate zones) and a new initiative to address coastal and marine pollution through improved wastewater treatment, and the Stockholm Convention on Persistent Organic Pollutants has entered into force; on the other hand, there have been continued land degradation and spread of deserts, high — if slightly slowed — deforestation rates, depletion of wild fish stocks, and ongoing loss of species habitat and biodiversity.

Official development assistance (ODA) from Organization for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC) countries reached its highest level ever in 2005, with a continuing shift from loans to grants. ODA is set to increase sharply in the next decade as several OECD countries move towards the 0.7 of gross national income (GNI) target. An emerging global consensus on aid effectiveness emphasizes ownership by partners of development strategies, alignment of donor support to those strategies, harmonization among donor actions, managing for results, and mutual accountability of donors and partners. New initiatives are planned to provide innovative sources of financing for combating pandemic disease and protecting global environmental assets.

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I. Introduction

1. The present report reviews overall progress in the implementation of Agenda 21,[1] the Programme for the Further Implementation of Agenda 21[2] and the Plan of Implementation of the World Summit on Sustainable Development ("Johannesburg Plan of Implementation"),[3] with the exception of those issues covered in the integrated state of implementation report pertaining to the thematic cluster for the 2006/2007 cycle: energy for sustainable development, industrial development, air pollution/atmosphere and climate change (E/CN.17/2006/7). In order to provide a focus for this report and to avoid repetition of information already provided in the overview report presented to the 2004 review session (E/CN.17/2004/2), attention is given to important recent developments, with a particular focus on time-bound targets contained in the Johannesburg Plan of Implementation.

II. Poverty eradication and access to basic social services

A. Reducing poverty and hunger

2. Progress towards achieving the Millennium Development Goal of reducing poverty by half by 2015 remains uneven across and within regions. Asia leads the way in reducing poverty rates, driven by the rapid economic growth of China, India, Viet Nam and several other South-East Asian countries. Many countries in sub-Saharan Africa are not on track to achieve the poverty reduction goal (figure I),[4] as productive opportunities have not kept pace with population growth, agriculture has stagnated and the HIV/AIDS epidemic has taken a heavy toll, particularly on young adults in their most productive years.

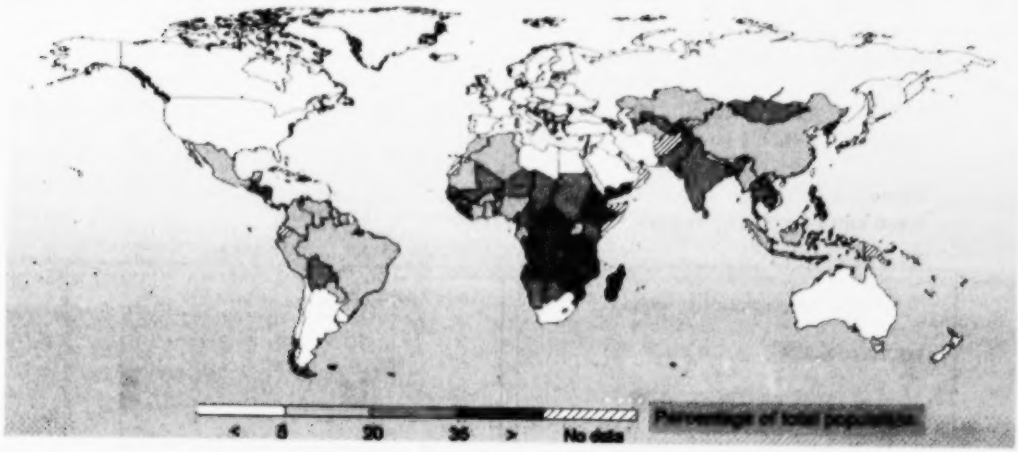
3. Sound and equitable management of natural resources and ecosystem services is critical to sustained poverty reduction. This reflects the important ways in which environmental conditions and access to environmental assets are linked to the livelihoods, health, security and empowerment of people living in poverty, particularly women and children. A majority of poor people live in rural areas, where they draw much of their livelihoods from the natural resource base — forests, pastures, fisheries or farming.[5]

4. With respect to hunger, the Food and Agriculture Organization of the United Nations (FAO) estimates that, in the period 2000-2002, 852 million people worldwide were undernourished, a reduction of 9 million since 1990-1992.[6] The proportion of undernourished adults in developing regions had dropped from 20 per cent in 1990-1992 to 17 per cent in 2000-2002, mainly reflecting progress in East and South-East Asia (see figure II). In other developing regions, notably sub-Saharan Africa and South Asia, while the proportion of undernourished people decreased somewhat, the numbers of hungry people grew. In Western Asia, both the number and the share of undernourished people increased. An increase in the number and proportion of undernourished people was particularly evident in the countries of the Commonwealth of Independent States (CIS) where 17 million people, or 23 per cent of the population, went without sufficient food in 2000-2002, up from 11 million in 1993-1995.

Figure I
Asia leads the way in reducing poverty rates

Source: *Millennium Development Goals Report, 2005* (United Nations publication, Sales No. E.05.I.16).

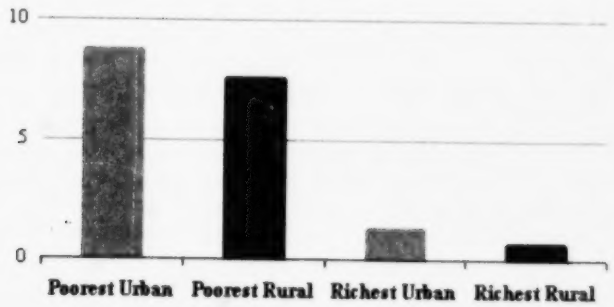
Figure II
Undernourished population, 2000-2002



Source: FAO, *FAO Statistical Yearbook, 2004*, vol. 1 (Rome, 2004).

5. A large majority of the world's hungry live in rural areas of the developing world. Hunger is a growing problem, however, in urban slums, which are now home to more than 40 per cent of urban inhabitants in developing countries.[7] In some countries, the poorest fifth of the urban population has a childhood malnutrition rate as high as or higher than that of the poorest fifth of the rural population (see figure III).

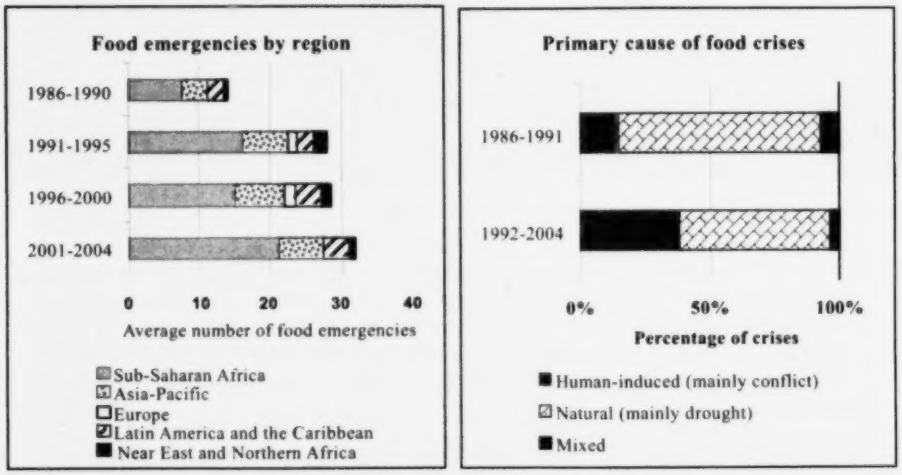
Figure III
Percentage of underweight children in Benin under age 5, by family wealth quintile and location



Source: World Bank, *World Development Indicators, 2005* (Washington, D.C., 2005).

6. While hunger is chronic owing to persistent poverty in many countries, in some cases, hunger is due to food crises caused by drought or conflict or a combination of the two (see figure IV). As of June 2005, the number of countries facing serious food shortages stood at 34, with 23 in Africa, 8 in Asia, 2 in Latin America and 1 in Europe.[8] Most of the crises have persisted over a prolonged period, with an average duration of nine years. The number of food emergencies has been rising over the past two decades, from an average of 15 per year during the 1980s to more than 30 per year since 2000. The average number of food emergencies each year in Africa has almost tripled since the 1980s.

Figure IV
Food emergencies by region and by primary causes, 1986-2004

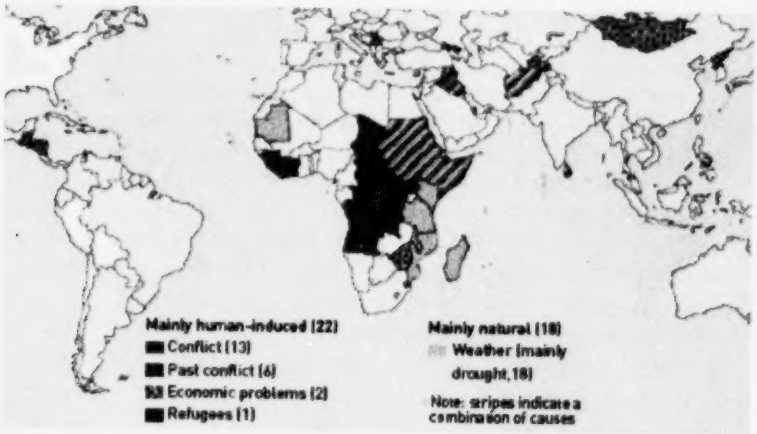


Source: FAO, *The State of Food Insecurity in the World, 2004* (Rome, 2004).

7. The recurrence and persistence of emergencies often compound the severity of their impact. Thirty-three countries experienced food emergencies during more than half of the years over the period 1986-2004. In particular, many conflict-induced complex emergencies are persistent and turn into long-term crises.[9]

8. The causes of food emergencies have also shifted over time. Since 1992, the proportion of emergencies attributed mainly to human causes, such as conflict or economic failures, has more than doubled, rising from about 15 per cent of the total to more than 35 per cent in 2004.[10]

Figure V
Food emergencies and their causes, 2003-2004



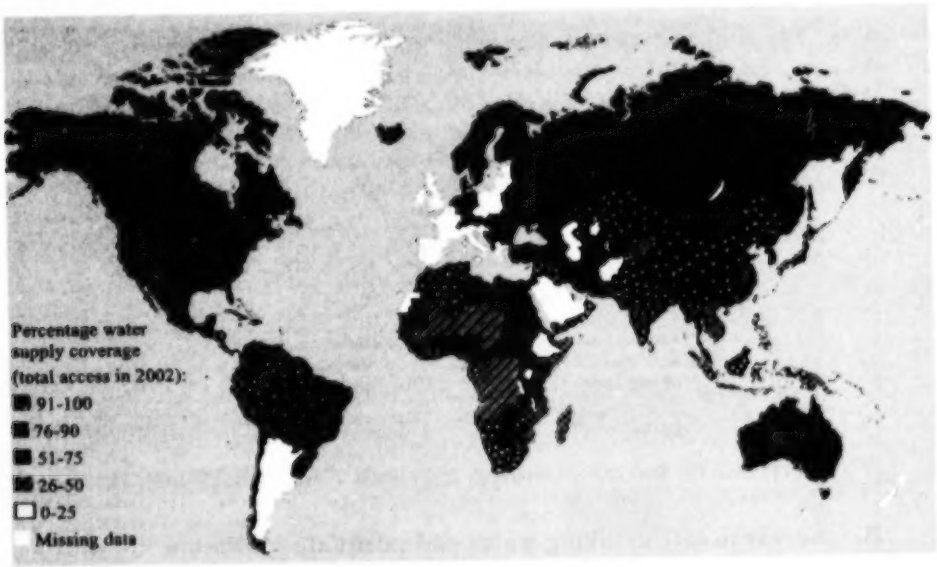
Source: FAO, *The State of Food Insecurity in the World, 2004* (Rome, 2004).

B. Access to safe drinking water and adequate sanitation

9. Investments in increasing access to water supply and sanitation yield very high rates of return, making them extremely attractive from a social investment standpoint. Improved water supplies and sanitation create time savings (that is to say, time not spent travelling long distances to fetch water) that can translate into higher economic output and productivity as well as greater school attendance. Reduced incidence of waterborne diseases is another significant source of benefits. Poor water quality and lack of sanitation account for nearly 40 per cent of all environmentally induced losses of disability-adjusted life years (DALYs)[11] in developing countries, ranking first as a cause in India and sub-Saharan Africa.[12] Because of economies of scale, investing to achieve comprehensive water and sanitation coverage can yield lower unit costs of provision than would less ambitious targets.[13]

10. South Asia is the region that has made the greatest progress in providing access to safe drinking water,[14] with coverage having increased from 71 to 84 per cent between 1990 and 2002, attributable primarily to India (see figure VI). Northern Africa, Latin America and the Caribbean, and Western Asia have achieved coverage levels of about 90 per cent. Progress in sub-Saharan Africa has also been impressive, with coverage having increased from 49 to 58 per cent between 1990 and 2002. The situation in Oceania did not improve much between 1990 and 2002, with almost half the population still not served by improved water supply. Oceania serves as a good example of the urban/rural dichotomy since the urban/rural coverage was 91/40 per cent, respectively.

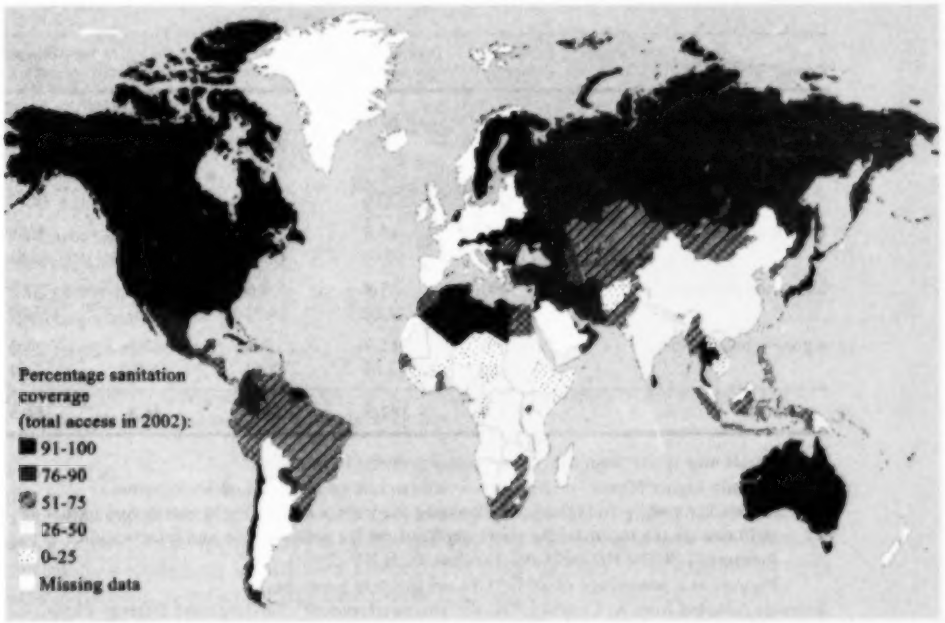
Figure VI
Global water supply coverage, 2002



Source: World Health Organization/United Nations Children's Fund (WHO/UNICEF) Joint Monitoring Programme for Water Supply and Sanitation.

11. Global sanitation coverage rose from 49 per cent in 1990 to 58 per cent in 2002 (see figure VII). In East Asia, sanitation coverage has almost doubled, while in South Asia coverage increased from 20 to 37 per cent. Northern Africa, Latin America and the Caribbean region have also made progress. Still, some 2.6 billion people — half of the developing world — live without improved sanitation. Without accelerated progress, the world will miss the 2015 Millennium Development Goal sanitation target by half a billion people and, given population growth, the number without access in that year could be almost as large as it is today.

Figure VII
Global sanitation coverage, 2002



Source: WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation.

12. In March 2005, the International Decade for Action, "Water for Life", 2005-2015 was launched, with activities to be promoted including pro-poor investments in water and sanitation access (see A/60/158)[15] water, sanitation and hygiene education for schools,[16] and the linkage of the Wastewater Emission Targets (WET) initiative to the Water, Sanitation and Hygiene for All campaign (WASH).

C. Protecting and promoting human health

13. Disability-adjusted life years (DALYs) are a measure of the burden of morbidity and mortality due to disease and accidents. Table 1 summarizes the number of DALYs lost due to various environmental causes. Environmental causes are estimated to be involved in just under 20 per cent of developing-country DALYs lost, compared with about 4 per cent in developed countries.[17]

Table 1
DALYs lost due to environmental causes, circa 2000
(Millions)

Cause	*Developed economies*	*Developing economies*	*China*	*India*	*Sub-Saharan Africa*
Water and sanitation	1.0	83.3	7.0	22.5	31.8
	(1.0)	(7.0)	(3.5)	(9.0)	(10.0)
Vector diseases (malaria)	0.0	35.7	0.0	1.3	28.6
		(3.0)		(0.5)	(9.0)
Indoor air pollution	0.0	47.6	7.0	15.0	17.5
		(4.0)	(3.5)	(6.0)	(5.5)
Urban air pollution	1.0	23.8	9.0	5.0	3.2
	(1.0)	(2.0)	(4.5)	(2.0)	(1.0)
Agro-industrial waste	2.5	11.9	3.0	2.5	3.2
	(2.5)	(1.0)	(1.5)	(1.0)	(1.0)
Total	**4.5**	**202.3**	**26.1**	**46.3**	**84.3**

Note: Totals may differ from sum of components owing to rounding.
Slightly higher losses — 53 million — due to indoor air pollution are reported in Y. von Schirnding and others, "Addressing the impact of household energy and indoor air pollution on the health of the poor: implications for policy action and intervention measures" (WHO/HDE/HID/02.9) (Geneva, WHO, 2002).
Figures as a percentage of all DALYs are given in parentheses.

Sources: Adapted from K. Lvovsky, "Health and environment", Environment Strategy Paper No. 1 (Washington, D.C., World Bank Environment Department, 2001); A. Bowden and J. A. Fox-Rushby, "A systematic and critical review of the process of translation and adaptation of generic health-related quality of life measures in Africa, Asia, Eastern Europe, the Middle East and South America", *Social Science and Medicine*, vol. 57, No. 7 (2003), pp. 1289-1306; and www.WorldBank.org.

14. Mortality rates for children under age 5 have declined by 15 per cent since 1990, but the rates remain high in developing countries. More than 10 million children still die each year in the developing world. About 70 per cent of the child mortality is due to acute respiratory infections, diarrhoea, measles and malaria, causes that are preventable through a combination of adequate food, clean water, hygiene, insecticide-treated bed nets, and medical treatment.

15. Worldwide, more than 50 million women suffer from poor reproductive health and serious pregnancy-related illness and disability. Every year more than 500,000 women die from complications of pregnancy and childbirth. Most deaths occur in Asia, but the risk of dying is highest in Africa. The chances of dying during pregnancy or childbirth over a lifetime are estimated to be as high as 1 in 16 in sub-Saharan Africa, compared with 1 in 3,800 in the developed world (see figure VIII).

Figure VIII
Maternal mortality ratios per 100,000 live births, 2000

Source: UNICEF estimates, as contained in *The Millennium Development Goals Report, 2005* (United Nations publication, Sales No. E.05.I.16).

HIV/AIDS

16. Through having killed more than 25 million people (3.1 million in 2005 alone) since it was first recognized in 1981, HIV/AIDS has become one of the most destructive epidemics in recorded history. The total number of people living with HIV/AIDS has reached an estimated 40.3 million, with sub-Saharan Africa being the hardest hit. Young people aged 15-24 account for half of all new HIV infections,[18] partly because of lack of education.[19] Some 2.2 million women with HIV infections give birth each year, with increased complications of pregnancy and childbirth, and with many of the infants infected with HIV and with many becoming AIDS orphans.[20]

17. On a more positive note, access to antiretroviral treatment and care has improved, and there is ample evidence that HIV does yield to determined and concerted interventions such as the "3 by 5" initiative,[21] launched by WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS), which aimed to provide drug treatment to 3 million people by 2005. Decreases in HIV incidence have been reported among young people in Uganda, among sex workers and their clients in Thailand, and among injecting drug users in Spain and Brazil. With the recent Thai Government initiative to make antiretrovirals available to poor people, HIV/AIDS-related mortality has declined steeply.

Tropical diseases

18. Tropical diseases — widespread or endemic infectious diseases in tropical and subtropical regions — account for about 5 million deaths per year.[22] Every year, there are at least 350 million cases of malaria worldwide, and over 1 million deaths, mostly of children under 5 years of age. Estimates suggest that malaria accounts for up to 40 per cent of all public expenditures on health — which are already very low in the worst affected countries — and 20-50 per cent of hospital admissions in some countries.[23] Out-of-pocket household expenditures on malaria prevention and treatment can also pose a financial burden, especially for the poorest households.[24]

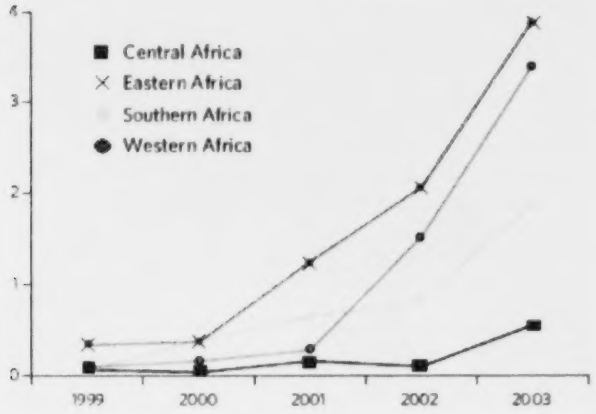
The greatest proportion (89 per cent) of the global malaria mortality burden is shouldered by Africa, while Asian countries account for approximately 10 per cent and the Americas for less than 1 per cent (see figure IX). Eighty countries are now benefiting from over $290 million for malaria control, including support for bed nets and artemisinin-based drug treatments, provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria established in 2001.[45]

Figure IX
Malaria cases (per 100,000) by country

Source: WHO, 2005.

19. Over the last two decades, the most common form of malaria has become increasingly resistant to drugs. More effective drug combinations based on artemisinin are now becoming more widely available to developing countries. Between 2001 and 2004, 40 countries — half of them in Africa — amended their drug policies to encourage use of these more effective antimalarial treatments. For preventing malaria, insecticide-treated mosquito nets have proved effective, and their distribution has increased tenfold since 2000 (see figure X).

Figure X
Mosquito nets sold or distributed in sub-Saharan Africa, 1999-2003
(Millions)



Source: *The Millennium Development Goals Report, 2005* (United Nations publication, Sales No. E.05.I.16).

D. Education for sustainable development

20. Target 3 of Millennium Development Goal 2 aims at a 100 per cent primary school completion rate for both boys and girls by 2015. Dropout rates remain especially high — almost half — in sub-Saharan Africa. Great progress has been made in primary school completion, particularly in Latin America and the Caribbean and South-East Asia, where over 90 per cent of children reach the final grade. In East Asia, all children complete primary school.

21. Most countries already recognize lower secondary as part of their compulsory or basic education systems. In most European, Northern African and South American countries, 95 per cent of children attend lower-secondary school (see figure XI). Ratios are typically over 85 per cent in Central Asia and Oceania. In Central America and the Caribbean, enrolment ratios are frequently below 85 per cent. Enrolment ratios are typically between 70 and 90 per cent in South and East Asia, with a few countries with ratios below 40 per cent. Lower-secondary enrolment ratios are below 40 per cent in half of the countries in sub-Saharan Africa and as low as 10-20 per cent in some African countries. On the other hand, Botswana, Cape Verde, Namibia, Seychelles and South Africa have achieved rates above 70 per cent.[26]

22. In 2002, the United Nations Decade of Education for Sustainable Development (2005-2014) was launched; and at the one hundred and seventy-second session of the Executive Board of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in September 2005, a consolidated draft International Implementation Scheme was approved.[27] Regional strategies for education for sustainable development have been prepared for Europe,[28] Northern America, and Asia and the Pacific.[29]

Figure XI
Comparing countries in terms of participation in lower-secondary education[a]

Source: UNESCO Institute for Statistics, *Global Education Digest, 2005* (Montreal, Quebec, Canada, UNESCO Institute for Statistics, 2005).
Note: Data for 33 countries referring to 2001; for 13 countries, to 1998-2000.
[a] Coverage: One hundred eighty-nine out of 207 countries.

III. Protecting and managing the natural resource base for development

23. The 2005 Millennium Ecosystem Assessment[30] highlighted the following outstanding challenges: the dire state of many of the world's fish stocks, the vulnerability to the loss of ecosystem services, including water supply, of the 2 billion people living in dry regions, and the growing threat to ecosystems from climate change and nutrient pollution.

A. Sustainable management of water, land resources, forests and mountain environments

Water

24. The need to balance water use and development with attention to securing the vital services that water-based ecosystems can provide will continue to increase with human population growth and associated changes in land use. Preparation of water management and efficiency plans, as agreed during the World Summit on Sustainable Development, is viewed as an important step towards achieving this balance, but available evidence suggests that progress on this goal has been uneven.

25. A number of countries have started implementing integrated water resource management plans and related actions, whose main thrust to date have consisted of institutional and policy reforms, decentralization and public participation accompanied by capacity-building efforts. The twelfth and thirteenth sessions of the Commission on Sustainable Development have contributed to a better understanding of what further actions should be implemented and how.

Land

26. Productive land is the basic natural resource with which rural populations sustain their existence. Its availability is increasingly threatened by land degradation,[31] which is estimated to affect up to 65 per cent of agricultural land. On about one fourth of the world's agricultural land, soil degradation is serious, with the pace of degradation having accelerated in the past 50 years. In developing countries, productivity has declined substantially on about 20 per cent of agricultural land.

27. Drylands occupy about 41 per cent of the Earth's land area and are home to more than 2 billion people. Some 10-20 per cent of drylands are considered degraded and about 1-6 per cent of the dryland population live in desert areas (see figure XII). The greatest threat of further desertification is considered to be in the drylands of sub-Saharan Africa and Central Asia. In three regions of Africa — the Sahel zone, the Horn of Africa, and Southeastern Africa — severe droughts occur on average once every 30 years. These droughts triple the number of people exposed to severe water scarcity, leading to major food and health crises.

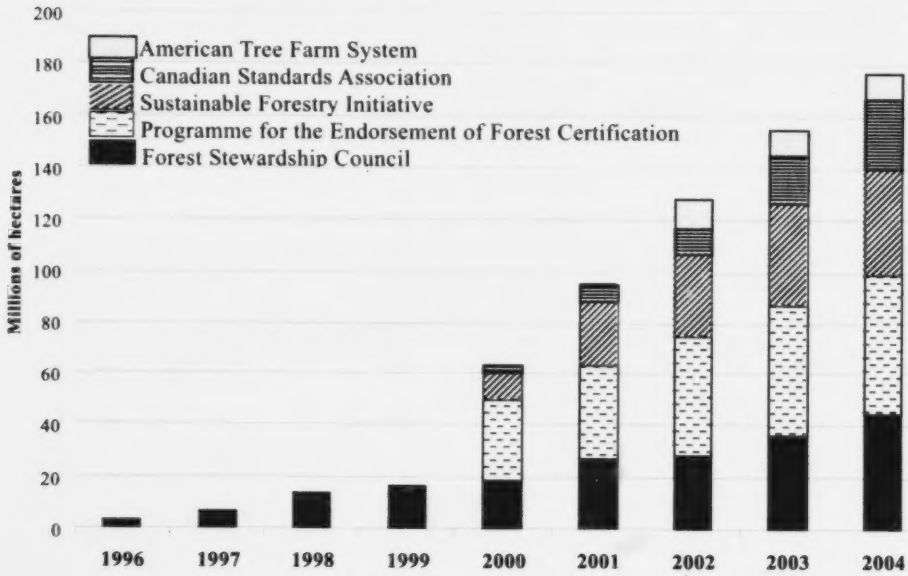
Figure XII
Land degradation and deforestation: forest cover change, 1980-2000

Source: Millennium Ecosystem Assessment.

Forests

28. Five countries — the Russian Federation, Brazil, Canada, the United States of America and China — together account for more than half of the world's just under 4 billion hectares of forest.[32] Forest loss — mostly from conversion to agricultural use — continues at a rate of roughly 13 million hectares per year. Forest planting, landscape restoration and natural growth, however, cut the net loss to slightly over half that amount, or 7.3 million hectares per year, down from 8.9 million in the period 1990-2000. More than 176 million hectares of forests worldwide are now certified as managed in a sustainable manner, and the amount is increasing at 15-20 per cent per year (see figure XIII). Most of the certified total is situated in Europe, Northern America and the successor States of the former Union of Soviet Socialist Republics. More than 20 per cent of the world's industrial round wood harvest is currently certified under different certification systems.

Figure XIII
Area of certified forests, 1996-2004



Source: FAO, *State of the World's Forests, 2005* (Rome, 2005).

Mountains

29. Mountain environments cover approximately one fourth of the world's land surface. They directly support 22 per cent of the world's people and millions more depend on the goods and services provided by mountains, including water, energy, timber and biodiversity.

30. The International Partnership for Sustainable Development in Mountain Regions, launched at the World Summit on Sustainable Development in 2002,[33] adopted the Declaration of the Andes and the Cusco Framework for Action to steer the work of the Partnership in its Second Global Meeting, held in Cusco, Peru, in 2004.[34]

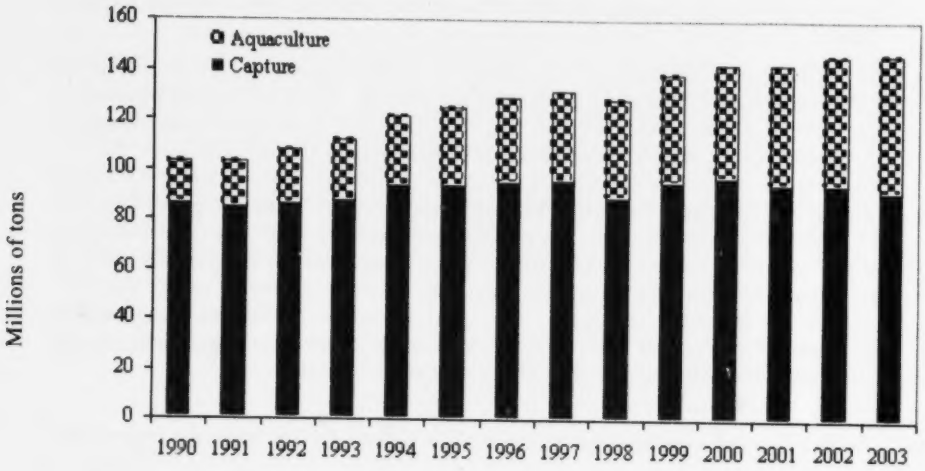
31. Inhabitants of critical watersheds — often mountain communities of indigenous people — would benefit from a further spread of the practice of payment for environmental services, which has been adopted in several Latin American countries. Costa Rica's programme provides grants to forest owners for the environmental services provided, such as the protection of water and biodiversity, and greenhouse gas mitigation. This instrument has significantly improved the size of protected areas with respect to previous programmes which provided incentives to reforestation.[35] In the city of Heredia, water charges are environmentally adjusted to finance the conservation of the watershed on which its water supply depends. Similar programmes now exist in several countries in the region, including Colombia, Ecuador and Mexico, and are planned in several others, including the Dominican Republic, El Salvador, Guatemala and Nicaragua.

B. Protection of oceans and sustainable use of living marine resources

32. The Oceans and Coastal Areas Network (renamed UN-OCEANS)[36] acts as a United Nations-wide inter-agency coordinating mechanism on ocean and coastal issues. In the effort to reduce marine pollution, 80 per cent of which arises from land-based activities, implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (document A/51/116, annex II) has focused on the Strategic Action Plan on Municipal Wastewater,[37] as well as promotion of integrated coastal and ocean management at national and regional levels.

33. In respect of fisheries, the capture fishery harvest has remained roughly constant since about 1990 (see figure XIV), while aquaculture output continues to expand (mainly due to China), resulting in some growth in global per capita fish production (see table 2). There are continuing concerns with regard to reducing overfishing of many species and addressing the social problem of fishers whose livelihoods are unsustainable.[38]

Figure XIV
Capture of aquaculture, 1990-2003



Source: FAO, *The State of World Fisheries and Aquaculture. 2004* (Rome, 2004).

34. While aquaculture can be an important means of increasing fish production and consumption, some forms of aquaculture can increase pressure on wild fisheries through use of wild-capture fish as feed. There are also concerns, particularly in the case of marine fish farming, over water pollution from fish farms, concentration of toxic chemicals in farmed fish, coastal zone damage from fish farm development, and negative effects on wild populations of escaped farmed fish.

35. The FAO Committee on Fisheries adopted, in March 2005, guidelines for "ecolabelling" of fish caught at sea,[39] drawing on the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations.[40] This Code sets out principles and standards for responsible practices so as to ensure the effective conservation, management and development of living aquatic resources, respecting ecosystems and biodiversity.

Table 2
Top 10 producers in aquaculture production: quantity and growth, 2000-2002

Top 10 producers (by quantity)	*2000*	*2002*	*Annual rate of growth (percentage)*
	Thousands of tons		
China	24 580.7	27 767.3	6.3
India	1 942.2	2 191.7	6.2
Indonesia	788.5	914.1	7.7
Japan	762.8	828.4	4.2
Bangladesh	657.1	786.6	9.4
Thailand	738.2	644.9	-6.5
Norway	491.2	553.9	6.2
Chile	391.6	545.7	18
Viet Nam	510.6	518.5	0.8
United States of America	456.0	497.3	4.4
Subtotal	**31 318.8**	**35 248.4**	**6.1**
Rest of the world	4 177.5	4 550.2	4.4
Total	**35 496.3**	**39 798.6**	**5.9**

Source: FAO, *The State of World Fisheries and Aquaculture, 2004* (Rome, 2004).

C. Conservation of biological resources

36. The 2005 Millennium Ecosystem Assessment concluded that there had been a substantial and largely irreversible loss in the diversity of life on Earth owing to human action (see box).

Declines and extinctions of species remain a major concern

The latest Red List of Threatened Species,[a] compiled by the World Conservation Union, indicated that as of 2004, some 15,503 species had been under threat, including 5,188 vertebrates, 1,992 invertebrates and 8,321 plants. At least 20 per cent of mammals, 12 per cent of birds and 31 per cent of amphibians are at risk of extinction over the next century.

Since around 1980, approximately 35 per cent of mangroves have been lost, while 20 per cent of the world's coral reefs have been destroyed and a further 20 per cent badly degraded. Findings of the World Wildlife Fund Living Planet Report, 2004, suggest an estimated 40 per cent decline in terrestrial, freshwater and marine wildlife populations for the period 1961-2000.

Sources: http://www.redlist.org/info/tables/table1; and http://assets.panda.org/downloads/lpr2004.pdf.

[a] Red List: http://www.redlist.org/info/tables/table1.html.

37. In implementation of the Johannesburg Summit's goal of reducing the rate of loss of biodiversity by 2010, the seventh meeting of the Conference of Parties to the Convention on Biological Diversity,[41] held in Kuala Lumpur in 2004, reached agreement on conserving at least 10 per cent of each ecosystem, stabilizing populations of certain declining species, and ensuring that international trade did not endanger any species of wild flora and fauna. Also, the Cartagena Protocol on Biosafety to the Convention on Biological Diversity[42] entered into force in 2003.

38. The United Nations List of Protected Areas, established in 2003, has over 100,000 sites, covering more than 18.8 million square kilometres, representing about 12.9 per cent of the national territory (land and sea) (see table 3).[43] Only 1.64 million square kilometres of the world's marine environment, about 0.5 per cent of the world's sea area, are protected. The seventh meeting of the Conference of Parties to the Convention on Biological Diversity agreed that the goal for work related to marine and coastal protected areas under the Convention should be the establishment and maintenance by 2012 of marine and coastal protected areas that were effectively managed, ecologically based and contribute to a global network of such areas, building on national and regional systems, and including a range of levels of protection. In addition, the seventh meeting provided guidance for the development of a national marine and coastal biodiversity management framework.[44]

Table 3
Proportion of total territorial area protected to maintain biological diversity, 1994, 2000 and 2004
(Percentage)

	Proportion of total territorial area protected (terrestrial and sea)		
	1994	*2000*	*2004*
World	11.2	12.3	12.9
Developing regions	11	11.8	12.8
Northern Africa	4.2	4.4	4.6
Sub-Saharan Africa	11.1	11.2	11.3
Latin America and the Caribbean	15.9	17.3	17.8
Eastern Asia	8.3	10.4	14.4
Southern Asia	5.2	5.6	5.9
South-East Asia	8.3	9.4	9.4
Western Asia	22.2	22.7	22.7
Oceania	2.4	2.5	2.5
Commonwealth of Independent States (CIS)	7.5	7.7	7.7
CIS, Asia	3.6	3.9	3.9
CIS, Europe	8.3	8.6	8.6
Developed regions	13.9	16.1	16.7

Sources: United Nations Statistics Division, Millennium Indicators Database; and United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC).

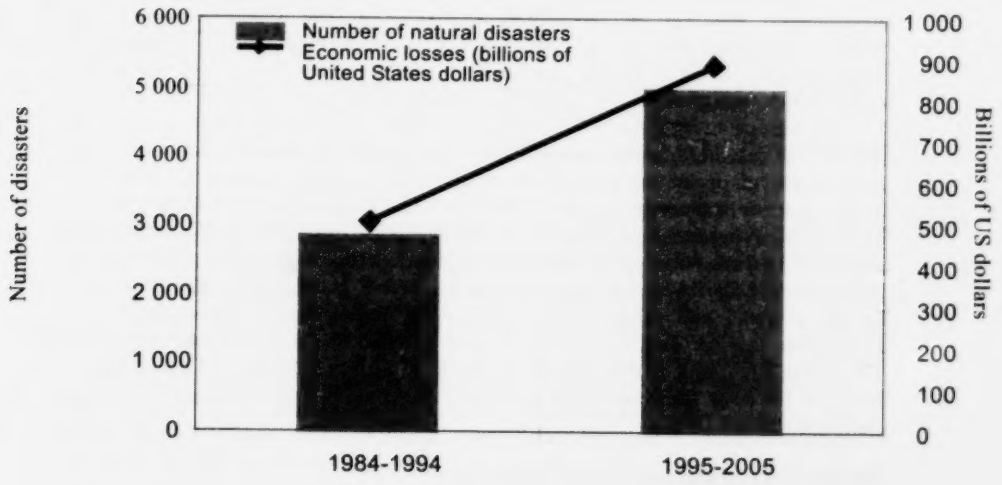
D. Natural disaster risk reduction and mitigation

39. Natural disasters adversely impact development and can undermine achievement of the Millennium Development Goals.[45] In the past two decades, on average more than 200 million people have been affected by disasters every year. In January 2005, the Secretary-General called for warning systems to cover all countries and all hazards. The adoption of the Hyogo Framework for Action, 2005-2015: Building the Resilience of Nations and Communities to Disasters,[46] adopted at the World Conference on Disaster Reduction, held in Kobe, Hyogo, Japan, from 18 to 22 January 2005, underlined the importance of knowing risk and enhancing early warning to reduce disasters. The International Early Warning Programme was launched at the Conference, against the backdrop of the Indian Ocean tsunami.[47]

40. The tsunami left 299,866 people dead or missing,[48] displaced over 2 million people and inspired pledges of an estimated US$ 13.6 billion.[49] Early warning systems for tsunamis have been in place in the Pacific region for the past 40 years, coordinated by the Intergovernmental Oceanographic Commission (IOC) of UNESCO. There was no tsunami warning system in the Indian Ocean on 26 December 2004. It is expected that the core early warning system will be in place in the Indian Ocean by June 2006.

41. In 2005, some 409 disasters killed nearly 90,000 people, affected over 133 million and caused economic losses of $155.6 billion (see figure XV). There is considerable variation in the occurrence and impact of natural hazards. More than 90 per cent of the deaths related to natural disasters occur in developing countries.[50] Asia was affected by approximately 43 per cent of all natural disasters in the last decade, and it accounted for almost 70 per cent of all lives lost.[51]

Figure XV
Economic impacts of disasters, 1984-1994 and 1995-2005



Source: Centre for Research on the Epidemiology of Disasters, Natural Disaster Trends, 1900-2005.

42. The World Bank and the United States Geological Survey have estimated that $40 billion invested in risk reduction strategies could have saved as much as $280 billion in worldwide losses from disasters in the 1990s — a $7 return on each $1 invested. According to experts, to build a new hospital with disaster-resilient structures and features would increase construction costs by only 4 per cent.[52]

43. Though microfinance has been strongly linked to poverty alleviation efforts for more than a decade, its potential for helping households in crisis or disaster situations has been recognized only recently, in particular after the devastating Bangladesh floods in 1998. Microfinance can give households opportunities for replacing damaged productive assets and for income diversification by source and season.[53]

44. The range of practical measures being adopted by countries to improve disaster preparedness include: strengthening national disaster management institutions; integrating disaster risk reduction into national policies; introducing stricter building codes in areas prone to earthquakes; and including disaster awareness and risk reduction in school curricula.

IV. Sustainable consumption and production

45. The Johannesburg Plan of Implementation adopted at the 2002 World Summit on Sustainable Development called for the development of a 10-year framework of programmes in support of regional and national initiatives to promote more sustainable consumption and production. The Marrakech Process was launched in 2003 to begin developing this framework. Regional processes have been set in motion in both developed and developing regions, and a high level of political commitment has been demonstrated at the regional, national and local levels.

46. In order to maintain the momentum of the process and to take practical steps to address priority concerns of different groups of countries and actors, the Second International Meeting on Sustainable Consumption and Production under the Marrakech Process held in San José, Costa Rica, in September 2005 proposed the establishment of task forces. Sweden initiated a Task Force on sustainable consumption patterns related to lifestyles and culture, in cooperation with the United Nations Environment Programme (UNEP). The United Kingdom of Great Britain and Northern Ireland announced a Task Force on sustainable products that would focus on promoting product innovation and ecodesign. Germany announced a Task Force on cooperation with Africa in conjunction with the African 10-Year Framework Programme on Sustainable Consumption and Production. Switzerland announced a Task Force on sustainable public procurement. Finally, a group of Latin American and Caribbean countries proposed a Task Force on sustainable production in micro, small and medium-sized enterprises. Subsequently, France initiated a sustainable tourism Task Force and Finland initiated one on sustainable buildings. The Costa Rica Task Forces can be a vehicle of technical assistance and capacity-building for developing countries in respect of promoting sustainable consumption and production.

Sustainable housing and urban settlements

47. The housing sector is a major consumer of energy and generator of waste, mostly as debris from demolition and reconstruction. Household energy

consumption depends in part on government regulations and building standards for insulation, windows and doors, lighting efficiency, and heating and air conditioning efficiency. Since the 1970s, many countries have established building codes to regulate, inter alia, energy efficiency and water usage.

48. Making cities more sustainable would be facilitated by integrated urban planning and management, involving cooperation among agencies responsible for land use, environment and transportation — agencies that have different and often competing priorities. Denmark and the Netherlands have addressed this problem through national spatial planning agencies: the Danish Spatial Planning Department within the Ministry of the Environment and the Netherlands Ministry of Spatial Planning, Housing and the Environment.

Sustainable transport

49. Congestion pricing schemes have been shown to be effective means of reducing traffic congestion through the use of economic disincentives, while efficient bus rapid transit systems have proved to be a cost-effective way to encourage a modal shift to public mass transit. Another trend is the substitution of compressed natural gas for gasoline and diesel fuel in vehicle fleets in cities. Natural-gas buses, taxis and delivery vehicles produce an average of 97 per cent less particulate matter, 84 per cent less carbon monoxide and 58 per cent less nitrogen oxide compared with conventional diesel engines. A measure enacted by local authorities in many countries is encouraging the use of bicycles through construction of bicycle paths or designation of separate bicycle lanes.

Sustainable tourism development

50. Tourism is one of the world's fastest-growing industries and an important source of foreign exchange and employment for many developing countries, especially small island developing States. While tourism typically accounts for 3-10 per cent of gross domestic product (GDP) in advanced economies, in some small developing countries it accounts for up to 40 per cent of GDP.[54] For more than 50 of the world's poorest countries, tourism is among the top three external revenue-earners. For the period 1997-2002, international tourism in developing countries increased by 9.5 per cent a year, compared with a global average of 4.6 per cent. Ecotourism has become a sizeable and growing share (roughly 10 per cent) of the tourism market.

51. The Convention on Biological Diversity Guidelines on Biodiversity and Tourism Development, adopted in 2004, promote sustainable tourism development, ensuring that tourism contributes to income-generation and poverty reduction and minimizes threats to biodiversity.[55]

Safe use of chemicals

52. The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade[56] entered into force in February 2004 and the Stockholm Convention on Persistent Organic Pollutants[57] entered into force in May 2004. A Persistent Organic Pollutants Review Committee will be responsible for evaluating additional chemicals that could be added to the initial list of 12 Persistent Organic Pollutants and overseeing a system

for requesting and registering temporary exemptions to the phase-out of certain chemicals.[58]

53. Roughly 110 countries worldwide either have completed or are in the process of preparation of national profiles for chemical management, many based on the guidance document of the United Nations Institute for Training and Research and the Inter-Organization Programme for the Sound Management of Chemicals (UNITAR/IOMC).[59] Funding is pending for a number of other country profiles.

Ecolabelling

54. Ecolabelling programmes have influenced product design in the areas of durability, hazards and recyclability. Criteria can cover the product itself, as well as the processes used to manufacture the product or other life cycle impacts. As consumer demand for ecolabelled products has increased, retailers have responded by putting pressure on suppliers to provide so-called green products. For example, in Sweden, the leading supermarket chain required its laundry detergent and home cleaning product suppliers to qualify for an ecolabel or face loss of shelf space. Major companies elsewhere have reformulated their products to reduce hazardous constituents and meet ecolabelling specifications.[60]

V. Means of implementation

55. The Johannesburg Plan of Implementation calls upon countries to "take immediate steps to make progress in the formulation and elaboration of national strategies for sustainable development and begin their implementation by 2005" (para. 162 (b)). According to estimates of the Department of Economic and Social Affairs of the United Nations Secretariat, based largely on country reports submitted to the Commission on Sustainable Development, approximately 36 per cent of the 191 States Members of the United Nations have met this goal. An additional 6 per cent are well into the process of developing their national sustainable development strategies. Although this still falls far short of the target of 100 per cent implementation, it does mark considerable progress.

56. The Johannesburg Plan of Implementation also notes that national sustainable development strategies, "where applicable, could be formulated as poverty reduction strategies that integrate economic, social and environmental aspects of sustainable development" (ibid.). A number of African countries are in the process of reviewing their Poverty Reduction Strategies, exploring ways to make them more integrative and to include all three pillars of sustainable development.

57. A peer review of France's national sustainable development strategies, held in February 2005, pioneered the development of a methodology for a shared-learning exchange on national sustainable development strategies reviews, covering process, content, outcomes, and monitoring and indicators.[61] As follow-up, the Department of Economic and Social Affairs organized two expert group meetings: one on integrating all three pillars of sustainable development into poverty reduction strategies, and the other on methodologies for — and experience in — reviewing national sustainable development strategies.

A. Trade expansion and trade liberalization

58. World trade growth decelerated moderately along with output growth in 2005, with much of the slowdown having occurred in the developed countries. Developing-country merchandise exports grew by almost 11 per cent. Chinese exports, boosted in part by the removal of Agreement on Textiles and Clothing quotas, grew by 26 per cent in real terms.[62]

59. In 2004-2005, prices of primary commodities increased faster than prices for manufactured goods, continuing the recent strengthening of commodity prices after a long period of decline. Oil saw the steepest increases, followed by metals and minerals, while agricultural product prices have barely kept pace with those of manufactures. Highly indebted oil-importing poor countries have experienced the worst terms-of-trade effects from these price movements.[63]

60. The World Trade Organization Agreement on Textiles and Clothing had eliminated textile and garment import quotas for World Trade Organization member countries as of 1 January 2005, opening export markets to countries that had previously been limited by quotas, and reducing preferences that had been enjoyed by other countries. The result was an overall increase in developing-country clothing and textile exports and some redistribution of exports among countries, with China, India, Jordan, Peru, Sri Lanka and Turkey having seen their exports to United States and European markets increase in the first half of 2005 at a rate faster than that reflected in the 20 per cent average increase.[64] (The European Union (EU) and the United States have since negotiated agreements with China to limit certain textile and clothing imports until end-2007 for the former and end-2008 for the latter.) Improvements to current Generalized System of Preferences schemes — for example, less stringent rules of origin and conditionalities — could help ease adverse impacts of quota termination on countries that had enjoyed preferential market access.[65]

61. *World Economic Situation and Prospects, 2006* considered that the outcome of the Sixth Ministerial Conference of the World Trade Organization, held in Hong Kong Special Administrative Region (SAR) of China in December 2005 had been "very modest and marginal, but nevertheless positive",[66] and that the most important process of consensus-building would have to take place in the first months of 2006. The meeting resulted in an agreement on cotton and an end-date for all export subsidies in agriculture.[67] Important as these are as stepping stones for further liberalization, neither is likely to have a significant impact on world agricultural markets, inasmuch as the agreement does not include any commitments on domestic subsidies, and export subsidies are only a small part of government support in most Organization for Economic Cooperation and Development (OECD) countries.

62. Although most least developed countries already have preferential access to developed-country markets under different initiatives, the decision to provide lasting concessions under the World Trade Organization aegis is important, insofar as it brings certainty to those concessions and removes tariff-rate quotas. Still, the fact that the agreement reached in Hong Kong SAR allows importing countries to exclude up to 3 per cent of least developed countries products (tariff lines) from liberalization could potentially result in small, if any, benefits for least developed countries with high product concentration of exports.

63. Commitments to lower or reduce tariffs on environmental goods have been agreed in principle, but difficulties in defining which goods should benefit from preferential treatment have so far stalled implementation. There are three categories being considered: goods to be used in environmental remediation or monitoring, technologies and products that are more environmentally friendly than average, and goods that have been produced in an environmentally friendly manner. In the first two cases, developing countries would benefit from cheaper imports of environmentally friendly technologies, and in the latter case, from increased exports in high-value market niches, such as organic foods.[68]

64. The benefits of trade liberalization will remain limited in the absence of measures to increase domestic capabilities and of investment to improve poor infrastructure. In most least developed countries, substantial external funding from developed countries will be required in light of the generally low local availability of financial resources. In Hong Kong SAR, a task force on aid for trade was created, which will report to the World Trade Organization General Council by July 2006.[69]

B. Financing sustainable development

65. Many developing countries will continue to rely on external financing to supplement domestic resource mobilization, including ODA, commercial borrowing, foreign direct investment (FDI), portfolio investment and workers' remittances.

ODA and external debt relief

66. In 2004, official development assistance (ODA) from Development Assistance Committee (DAC) countries reached its highest level, $78.6 billion, representing a 4.6 per cent increase in real terms from 2003 to 2004 (see table 4 for the timetable for reaching the ODA target). ODA is expected to rise further, reaching $97.2 billion in 2006. If all donors deliver on their promises, aid should rise from 0.26 per cent of gross national income (GNI) in 2004 to 0.30 per cent of GNI by 2006.[70] There has been a continuing shift in ODA from loans to grants.[71]

Table 4
Timetable for reaching the ODA target

		2003	*2010*	*2012*	*2013*	*2015*
European Union	Joined before 2002		0.56	Goal achieved →		**0.70**
	Joined after 2002		0.17	Goal not achieved →		0.33
France		0.41	Goal achieved by 2012 →	**0.70**		
United Kingdom		0.34	Goal achieved by 2013 →		**0.70**	
Germany		0.28	0.51	Goal achieved →		**0.70**
Italy		0.17	0.51	Goal achieved →		**0.70**

Sources: European Commission, *Bulletin of the European Union*; and *The Millennium Development Goals Report, 2005*.

67. Principles of aid effectiveness have been agreed in the Paris Declaration of March 2005, signed by 91 participating donor and partner countries and several dozen international organizations, including the international financial institutions and civil society organizations. The principles include ownership, alignment, harmonization, managing for results and mutual accountability, and are accompanied by a number of concrete targets for 2010.[72] There has also been a call by the development community to increase the shares of ODA that are administered directly through recipient-country budgets in support of national development strategies that incorporate the internationally agreed development goals, including the Millennium Development Goals.[73]

68. Developing countries' burden of external debt (public and private) declined from a peak of 45 per cent of GNI in 1999 to an estimated 39 per cent of GNI in 2003, as GNI had grown three times faster than debt. Other indicators of developing countries' debt burden have improved as well: ratios of debt to exports had dropped from 135 per cent in 1997 to 125 per cent in 2003. Amid the overall improvement, however, the debt circumstances of individual countries differ considerably. The reduction in aggregate debt burden has been driven by large improvements in a few countries (representing about 30 per cent of outstanding debt).[74]

69. The Heavily Indebted Poor Countries (HIPC) Initiative, launched by the World Bank and the International Monetary Fund (IMF) in 1996, has contributed to the reduction in debt burden. Debt reduction packages have been approved for 27 countries, 23 of them in Africa, providing $32 billion in debt-service relief over time. Fifteen countries have now reached their "completion points" and have received irrevocable debt relief.

70. The G-8 countries, at the 2005 Gleneagles Summit, proposed 100 per cent debt cancellation for heavily indebted poor countries, while preserving the financial capacity of the international financial institutions. The bulk of the debt relief would be provided by the World Bank International Development Association (IDA) facility. A number of issues need to be resolved before the proposal can be implemented, including donor financing and additionality of donor resources.

71. Work has progressed on innovative financing mechanisms to mobilize the additional financing needed to achieve the Millennium Development Goals. The International Financing Facility proposal launched by the United Kingdom in 2003, which now has the support of all European members of the G-7 plus Sweden, would significantly increase funding to poor countries in the short term by issuing bonds and using the proceeds as grants for development agencies.[75] The plane ticket tax proposal is another example of an innovative mechanism, so far backed by Algeria, Brazil, Chile, France, Germany and Spain, which would finance both the fight against major epidemics such as HIV/AIDS and improved health care in Africa. France is expecting to introduce a "solidarity" tax on airline tickets from 1 July 2006, generating estimated annual revenue of 200 million euros.

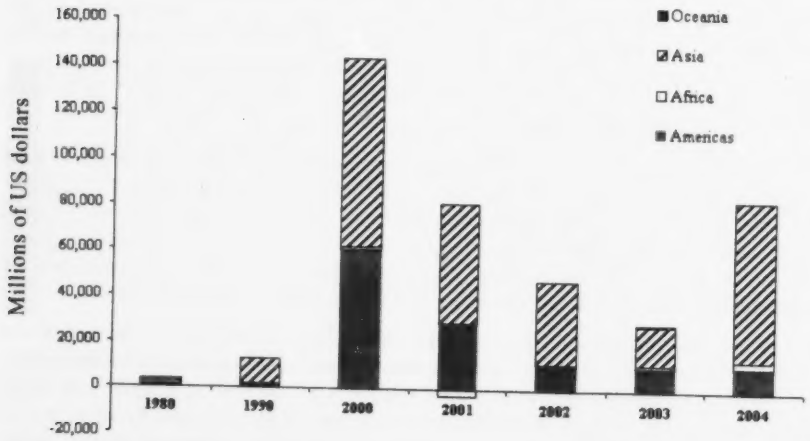
Private capital flows

72. Net private capital inflows to developing countries as a group fell substantially in 2005 to $95 billion from a peak of $184 billion reported in 2004.[76] Net FDI flows to developing countries increased by about 12 per cent in the period 2004-2005, to $172 billion, following a similar percentage increase in the period 2003-2004. FDI flows are highly concentrated in a few countries, notably Brazil, China, India and

Mexico, with China continuing to be the largest developing-country recipient. While still a small FDI recipient for its size, India is now ranked in a major survey of multinationals as the second most attractive country in which to invest, after China.[77] Boosted in large part by high commodity prices, FDI flows to Africa have grown by almost two thirds in the period 2004-2005, but they are still less than half of those to Latin America and the Caribbean and less than one fifth of those to Asia.[78] The share of FDI flowing to low-income countries reached 11 per cent, the highest in 15 years, and the share of developing countries in world FDI inflows reached 36 per cent, the highest level since 1997.

73. Outward FDI from developing countries has grown rapidly in the past decade and a half, with developing Asia in particular and Latin America emerging as important sources (see figure XVI). Outward flows from the Asia-Pacific region quadrupled in the period 2003-2004 to $69 billion. Most of these investments have been intraregional, taking place among the economies of East and South-East Asia, but interregional investment has also increased.

Figure XVI
FDI outflows from developing countries, by region, 1980-2004



Source: UNCTAD FDI database.

74. Remittances received by developing countries, estimated using officially recorded data, rose to an estimated $167 billion in 2005, up 73 per cent from 2001.[79] More than half of that increase occurred in China, India and Mexico. Low-income countries, led by India, registered an increase of $18 billion during this period. The growing importance of remittances as a source of foreign exchange is reflected in the fact that remittance growth outpaced private capital flows and ODA over the last decade.

75. While the impact of remittances on growth is unclear, remittances do play an important role in reducing the incidence and severity of poverty.[80] Remittances directly increase the income of the recipient and can help smooth household consumption, especially in response to adverse events, such as crop failure or a

health crisis. They are also an important source of investment in improved housing and can contribute to increased household investments in education, entrepreneurship and health — all of which can have a high social return.

Funding for meeting global environmental and health challenges

76. Global funding is essential for addressing global environmental challenges like protection of the ozone layer, stabilization of the climate system, and the conservation of biological diversity, for the control and treatment of infectious diseases, for the generation and dissemination of certain types of knowledge, and for strengthening peace and security.[81]

77. The largest single multilateral funding source for investing in global environmental assets is the Global Environment Facility (GEF), established in 1991, which helps developing countries and countries with economies in transition fund projects and programmes that protect the global environment, including projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants.[82] These have had considerable impact on a number of fronts. For instance, it is estimated that the Facility's climate change portfolio will result in a global environmental benefit of over 1.2 billion tons of carbon dioxide avoided, with the largest impact coming from energy efficiency projects.[83]

78. In 2000, the Secretary-General, urging the international community to fund prevention and treatment of major infectious diseases, established the Global Fund to Fight AIDS, Tuberculosis and Malaria. Similarly, the WHO Commission on Macroeconomics and Health pleaded for a substantial increase in funding for health care, with particular reference to the creation of a global health research fund. To date, most countries have met only partially their financial commitments to the Global Fund. Although currently the Global Fund focuses solely on the prevention and treatment of these diseases, there is scope for directing additional resources towards vaccine research and development. Today, most of the funding for vaccine research and development comes from private organizations, some of which, like the Bill and Melinda Gates Foundation, have considerable funds. Public-private partnerships like the Global Alliance for Vaccines and Immunization (GAVI) and the International AIDS Vaccine Initiative (IAVI) are also important initiatives, although they have a temporary mandate and limited financial resources.[84]

79. In addition to well-known pandemics, there are a number of less publicized but deadly diseases, including Japanese encephalitis, leishmaniasis and rotavirus, which mainly affect people in the developing world. While an effective and safe Chinese vaccine for Japanese encephalitis has existed for some time, WHO bureaucratic procedures had reportedly obstructed its approval for wider dissemination until action was recently forced by sustained pressure from private non-profit organizations such as the Rockefeller Foundation and the Bill and Melinda Gates Foundation.[85]

VI. Continuing challenges

80. **Sustainable development encompasses both intragenerational and intergenerational equity. With respect to the former, persistent poverty in many parts of the developing world — and also persistent pockets of poverty in the**

developed world and in transition economies — remains a formidable challenge facing the international community. The remarkable progress that East Asia — most recently China and Viet Nam — has made in reducing poverty, and the encouraging progress being made in parts of South Asia, reinforce the conviction that "to make poverty history" need not be a utopian project. At the same time, a sober assessment is in order of the obstacles to similarly dramatic poverty reduction in much of sub-Saharan Africa. The HIV/AIDS epidemic alone has had strongly adverse effects on growth and poverty reduction. Malaria and other debilitating tropical diseases continue to exact a heavy toll in health and life. Conflicts and adverse climate exacerbate food crises in Africa and elsewhere.

81. The countries that have made least progress in reducing poverty and stimulating economic growth are usually those racked by internal conflict or warfare with neighbours and those that have largely isolated themselves from trade, investment and other economic contacts with the rest of the world. With respect to conflict, recently reported data suggest that the situation has improved dramatically over the past decade, with both intra-State and inter-State conflicts substantially reduced from their peak in the late 1980s/early 1990s.[86] This same period has also witnessed a marked shift in institutions of political governance in much of the world towards encompassing civil society participation to a higher degree. Nevertheless, weak and at times corrupt institutions of political governance remain a retardant of better economic performance in a sizeable number of countries.

82. At the international level, progress has been slow on implementing the Doha Development Agenda, and much still remains to be done post-Hong Kong if a trade round that significantly benefits poor countries is to be concluded. New donor commitments on ODA are welcome, though the targets are several years in the future. As aid is ramped up, redoubled efforts will be needed by all development partners to ensure that the increased resource flows have the intended developmental impacts.

83. Along with donor support to Governments for provision of infrastructure, health care, education, water supply, sanitation and other basic services, there has also been support garnered from a variety of sources, including private foundations and public-private partnerships, for targeted interventions to address pressing problems. Long-neglected tropical diseases and HIV/AIDS prevention and treatment in poor countries have become the focus of some such initiatives, though they are still being resourced at inadequate levels.

84. Finally, considerations of intergenerational equity still exert only a weak hold over people's imaginations and an even weaker one over their purses. Moreover, it is increasingly clear that adequately addressing intergenerational equity requires greater intragenerational equity. Indeed, the burden of poverty in much of the developing world renders difficult if not impossible the investments in the future — for example, the protection of fragile ecosystems, the conservation of biodiversity and the sustainable management of forests, to name a few — that the rich countries of the world could far more readily afford, assuming they were willing to pay. While already various payments are being made in practice (for example, through official financing under the Global Environment Facility, bilateral and multilateral development assistance,

contributions to environmental non-governmental organizations, price premia for sustainably produced goods, and ecotourism), those transfers are currently far from adequate in terms of securing a suitable bequest for future generations.

Notes

[1] *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992*, vol. I, *Resolutions Adopted by the Conference* (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex II.

[2] General Assembly resolution S-19/2, annex.

[3] *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

[4] See *The Millennium Development Goals Report, 2005* (United Nations publication, Sales No. E.05.I.16) for more information on progress towards all the Millennium Development Goals since 1990; information on Goal 1 is available from http://unstats.un.org/unsd/mi/goals_2005/goal_1.pdf.

[5] The United Nations Development Programme/United Nations Environment Programme (UNDP/UNEP) Poverty and Environment Initiative (PEI) aims to scale up investment and capacity for mainstreaming environment in country-led processes to achieve the Millennium Development Goals, in particular Millennium Development Goal-based poverty reduction strategies. See *Sustaining the Environment to Fight Poverty and Achieve the MDGs* (New York, UNDP, 2005).

[6] www.fao.org/monitoringprogress/index_en.html.

[7] FAO, *The State of Food Insecurity in the World, 2004* (Rome, 2004).

[8] FAO, *The State of Food and Agriculture, 2005* (Rome, 2005).

[9] Ibid.

[10] Ibid.

[11] DALYs are an indicator developed by the World Health Organization that combines life expectancy and the health quality of a year lived.

[12] *Investing in Environmental Wealth for Poverty Reduction* (New York, UNDP, 2005), also available from http://www.undp.org/pei/peppapers.html.

[13] Ibid.

[14] Access to water-supply services signifies the availability of at least 20 litres per person per day from an "improved" source within 1 kilometre of the user's dwelling. An "improved" source is one that provides "safe" water, such as a household connection, a borehole, etc.

[15] Also available from www.un.org/waterforlifedecade/sg_report.pdf.

[16] Ibid.

[17] See *Investing in Environmental Wealth for Poverty Reduction* ..., C. Murray and R. Lopez, eds. *The Global Burden of Disease* (Cambridge, Massachusetts, Harvard University Press, 1996); and K. Lvovsky, "Health and environment", Environment Strategy Paper No. 1 (Washington, D.C., World Bank Environment Department, 2001).

[18] See *AIDS Epidemic Update, December 2005* (Geneva, UNAIDS, and WHO, 2005) for more information.

[19] Ibid.

[20] "HOPE: Building Capacity", UNDP report.

[21] www.who.int/3by5/progressreportJune2005/en/.

[22] WHO Mortality Database.

[23] WHO/UNICEF, "The Africa malaria report, 2003".

[24] WHO/UNICEF, *World Malaria Report, 2005* (Geneva, 2005).

[25] www.theglobalfund.org/en/about/malaria/default.asp.

[26] *Global Education Digest 2005* (Montreal, Quebec, Canada, UNESCO Institute for Statistic 2005).

[27] http://unesdoc.unesco.org/images/0014/001403/140372e.pdf.

[28] www.unece.org/env/esd/HLmeetMarch12005.htm.

[29] www2.unescobkk.org/elib/publications/esd_situation_analysis; and www2.unescobkk.org/elib/publications/esd_working_paper.

[30] Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Synthesis Report* (Washington, D.C., Island Press, 2006).

[31] Forest cover change estimates are from national statistics studies (1980-2000), remote sensing and, to a limited degree, expert opinion. Estimates of land degradation in drylands (desertification) are based mainly on expert opinion of conditions within the last half-century and are considered to be of low certainty.

[32] FAO, *Forest Resource Assessment, 2005*: http://www.fao.org/forestry/foris/webview/forestry2/index.jsp?siteId=67738&sitetreeId=28699&langId=1&geoId=0.

[33] www.mountainpartnership.org.

[34] http://www.condesan.org/cusco2004/english.htm.

[35] J. B. Orozco and R. M. Keynor, "*Uso de Instrumentos Económicos Para la Gestión Ambiental en Costa Rica*, Serie Medio Ambiente y Desarollo, No. 51, Economic Commission for Latin American and the Caribbean, Santiago, June 2002 (United Nations publication, Sales No. S.02.II.G.45). 2002; see also S. Pagiola, A. Arcenas and G. Platais, "Can payments for environmental services help reduce poverty? an exploration of the issues and the evidence to date from Latin America", *World Development*, vol. 33, No. 2 (2004), pp. 237-253.

[36] www.un-oceans.org.

[37] UNEP/WHO/UN-Habitat/Water Supply and Sanitation Collaborative Council Guidelines on Municipal Wastewater Management are available from www.gpa.unep.org/training/documents/Guidelines_Municipal_Wastewater_Mgnt%20version3.pdf.

[38] FAO, *The State of World Fisheries and Aquaculture, 2004* (Rome, 2004).

[39] www.fao.org/fi/agreem/codecond/codecon.asp.

[40] *International Fisheries Instruments with Index* (United Nations publication, Sales No. E.98.V.11), sect. III.

[41] United Nations, *Treaty Series*, vol. 1760, No. 30619.

[42] Ibid., vol. 2226, No. 30619.

[43] www.unep.org/PDF/Un-list-protected-areas.pdf.

[44] http://www.biodiv.org/programmes/areas/marine/protected.asp.

[45] http://www.undp.org/bcpr/disred/rdr.htm#contents.

[46] See A/CONF.206/6 and Corr.1, chap. I, resolution 2.

[47] See International Strategy for Disaster Reduction website: Third International Conference on Early Warning: From Concept to Action, 27-29 March 2006, Bonn, Germany, second announcement (http://www.unisdr.org/news/EWC3-second-announcement-english.pdf).

[48] http://www.tsunamispecialenvoy.org/country/humantoll.asp.

[49] http://www.tsunamispecialenvoy.org/financial.

[50] http://www.unisdr.org/eng/about_isdr/basic_docs/LwR2004/ch2%20Section%202.pdf.

[51] http://www.tsunamispecialenvoy.org/presscenter/key_disaster_stats.asp.

[52] Ibid.

[53] http://www.unisdr.org/eng/about_isdr/basic_docs/LwR2004/ch5%20Section%204.pdf.

[54] World Tourism Organization, *Yearbook of Tourism Statistics*, 1997-2002, Madrid.

[55] www.biodiv.org/programmes/socio-eco/tourism/guidelines.asp.

[56] www.pic.int; and United Nations, *Treaty Series*, vol. 2244, No. 39973.

[57] United Nations, *Treaty Series*, vol. 2256, No. 40214.

[58] www.pops.int/documents/meetings/cop_1/press/pr5-05POPsCOP1.pdf.

[59] http://www.unitar.org/cwg/np/np3.html.

[60] http://www.ilsr.org/recycling/epr/tools.html.

[61] http://www.un.org/esa/sustdev/natlinfo/nsds/peer_review.htm.

[62] *World Economic Situation and Prospects, 2006* (United Nations publication, Sales No. E.06.II.C.2).

[63] World Bank, *Global Economic Prospects, 2006* (Washington, D.C., 2005).

[64] Ibid.

[65] *World Economic Situation and Prospects, 2006* ..., p. 86.

[66] Ibid., p. ix.

[67] http://www.wto.org/english/thewto_e/minist_e/min05_e/final_text_e.htm.

[68] E. Lendo, "Defining environmental goods and services and their trade and sustainable development implications: a case study of Mexico", report commissioned by the International Centre for Trade and Sustainable Development and the North American Commission for Environmental Cooperation, June 2005.

[69] J. E. Stiglitz and A. Charlston, "The Doha Round after Hong Kong: a preliminary evaluation of progress made at the Hong Kong Ministerial", paper prepared for the conference "Assessment of the Doha Round after Hong Kong" organized by the Initiative for Policy Dialogue at Columbia University and the Brooks World Poverty Institute at Manchester University, 2 and 3 February 2006, Manchester, United Kingdom.

[70] Development Assistance Committee/ODA data from the statistical annex of the 2005 OECD *Development Co-operation Report* (Paris, 2005); also from *World Economic Situation and Prospects, 2006* ....

[71] For more details on recent ODA trends, see *World Economic and Social Survey, 2005* (United Nations publication, Sales No. E.05.II.C.1).

[72] http://www1.worldbank.org/harmonization/Paris/FINALPARISDECLARATION.pdf.

[73] *World Economic Situation and Prospects, 2006* ....

[74] World Bank, *Global Development Finance, 2005* (Washington, D.C., 2005).

[75] HM Treasury UK: http://www.hm-treasury.gov.uk/documents/international_issues/international_development/development_iff.cfm.

[76] IMF figures as reported in table III.2 of *World Economic Situation and Prospects, 2006* ....

[77] *Foreign Direct Investment Confidence Index*, 2005 ed. (Alexandria, Virginia, Global Business Policy Council/A. T. Kearny, Inc., 2005).

[78] See table III.3 of *World Economic Situation and Prospects, 2006* ..., based on United Nations Conference on Trade and Development (UNCTAD) data.

[79] *Global Economic Prospects, 2006* ....

[80] Ibid.

[81] International Task Force on Global Public Goods, "International cooperation in the national interest: a cross-cutting approach to enhancing the provision of global public goods with specific focus on global commons", 28 October 2004, available from http://www.oecd.org/dataoecd/18/26/34355005.pdf.

[82] http://www.gefweb.org.

[83] United Nations, Department of Economic and Social Affairs, "Trends in Sustainable Development", forthcoming.

[84] D. Archibugi and K. Bizarri, "Committing to vaccine R&D: a global science policy priority", *Research Policy*, vol. 33 (2004), pp. 1657-1671.

[85] Sebastian Mallaby, "Curing medicine's 'orphans': when rich countries ignore far-away diseases", *The Washington Post*, 19 December 2005.

[86] See *The Human Security Report, 2005* (New York, Oxford University Press, 2005), also available from http://www.humansecurityreport.info.